DOCUMENT RESUME

ED 261 625 HE 018 724

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TITLE Enrollment Pattern of Asian American Students in Postsecondary Education.
PUB DATE 2 Apr 85
NOTE 15p.; Paper presented at the Annual Meeting of the American Educational Research Association (69th, Chicago, IL, March 31-April 4, 1985).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Persistence; *Asian Americans; College Bound Students; *College Students; Eligibility; *Enrollment Trends; Higher Education; Longitudinal Studies; *Majors (Students); *Pacific Americans; Student Financial Aid
IDENTIFIERS *High School and Beyond (NCES)

ABSTRACT

College attendance patterns for Asian Americans and their academic persistence, choice of study, and sources of financial aid were assessed, based on results of the High School and Beyond Study, a longitudinal study of high school sophomores and seniors in 1980. Findings for the sample of 439 sophomores and 391 seniors include: 86 percent of Asian Americans entered some kind of postsecondary program by February 1982 (51 percent to four-year colleges, 37 percent to two-year colleges, and 4 percent to vocational or technical schools); compared with other racial/ethnic groups, Asian Americans had a higher entry rate, particularly at the four-year college level; and 12 percent of Asian Americans who entered a four-year college by June 1981 transferred to another college and 2 percent completed their program or withdrew. At both the two- and four-year college levels, Asian American students were more likely to stay in the same college than other racial/ethnic groups. Popular fields of study for Asian Americans were engineering (15 percent), business management (20 percent), computer science (7 percent), and life sciences (8 percent). While many Asian American students could have qualified for financial aid, they were less likely than other students to receive any type of aid. (SW)

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# Enrollment Pattern of Asian American Students in Postsecondary Education

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April 2, 1985

This paper was presented at the annual meeting of the American Educat..onal Research Association in Chicago, April 2, 1985. The findings, opinions, and conclusions expressed in this paper are those of the author. No official endorsement by the U.S. Department of Education is intended, nor should it be inferred.

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## Enrollment Pattern of Asian American Students in Postsecondary Education (1)

Asian Americans have placed a great emphasis on receiving a good education (2). In a previous study, Peng, Fetters, and Owings (1984) found that Asian American high school students generally took more academic courses in school, had higher educational aspiration, and scored higher in achievement tests than other minority students. This study attempted to examine whether this positive achievement continues to be manifested in the postsecondary education enrollment. The study also examines the types of financial sources used by Asian American students to support their education.

Results show that Asian American high school graduates are more likely than other students to continue education at a postsecondary institution (3). They also are more likely to persist in their studies at all types of institutions. Their financial resources, however, are not better than other students'. Results also show that Asian American students are more likely than other students to major in engineering, physical sciences, and life sciences.

These results are based on analyses of the data collected by the High School and Beyond study (HS&B). HS&B is a longitudinal study of the high school sophomores and seniors in 1980. The base-year survey was conducted in spring 1980, involving a sample of 30,000 sophomores and 28,000 seniors. In spring 1982, almost all sophomores in the original sample and a subsample of 12,000 seniors were resurveyed (i.e., the first follow-up survey). In

spring 1984 the same subsample of seniors and a subsample of 15,000 sophomores were recontacted to obtain information about their educational, occupational, and other personal development. Data from these surveys were the basis for this paper. Detailed description of the data base can be found in the Users' Manual for High School and Beyond data tapes (Jones, et al., 1985).

Results of the study are grouped into the following sections: 1) entry into postsecondary education; 2.) persistence in college; 3) field of study; and 4) financing postsecondary education. It should be noted that the sample size for the Asian Americans is small (439 in the sophomore cohort and 391 in the senior cohort). Thus, no further subgrouping by, for example, geographic region and socioeconomic status was performed.

## Entry to Postsecondary Education

The majority of Asian American high school graduates continue their education in postsecondary institutions. Of the 1980 class, about 86 percent of Asian Americans entered some kind of postsecondary institutions by February 1982. More specifically, about 51 percent of them entered 4-year colleges, 37 percent entered 2-year colleges, and 4 percent entered non-collegiate vocational/technical schools (table 1).

Comparing with other racial/ethnic groups, Asian Americans had a higher entry rate, particularly at the 4-year college level. As shown in table 1, Asian Americans were more than twice as

likely as Hispanics or American Indians to enter a 4-year college.

This high college entry rate was also observed among the 1980 sophomores who entered colleges by February 1984. The overall entry rates were 80, 63, 55, 51 and 41 percent, respectively, for Asian Americans, whites, blacks, Hispanics, and American Indians.

Persistence in College

Asian American students also show a high degree of stability of attendance in college education. About 86 percent of the 1980 Asian American seniors who had entered a 4-year college by June 1981 stayed in the same college through February 1982, while 12 percent transferred to another college and only 2 percent completed a short program or withdrew. At the 2-year college level, 70 percent remained in the same college, 21 percent transferred, and 9 percent completed their program or dropped out (table 2).

From table 2 it can be seen that Asian American students were more likely to stay in the same college (i.e., persister) than other racial/ethnic group students, at both the 4-year and 2-year college levels. For example, the persistence rates in the 4-year colleges were 75, 71, and 66 percent, respectively, for whites, blacks, and Hispanics, as compared to 86 percent for Asian Americans.

The stability of student attendance also is reflected in the low percentage of students who withdrew from colleges. About one and one half years after entering 4-year colleges, only 2 percent of Asian American students withdrew or completed a short program,

as compared to 9 percent of white, 15 percent of black, and 17 percent of Hispanic students who did so. This lower withdrawal rate of Asian Americans also was observed at the 2-year college level. (It should be noted that at the high school level, Asian Americans also have a much lower dropout rate than other groups of students.)

Field of Study

Various studies have found that Asian Americans are more likely to enroll in the fields of engineering and physical sciences (Tsang & Wing, 1985; Bagasoa, 1984). This finding was further supported by the results of this study.

Based on the 1980 sophomore cohort data, about 15 percent of the Asian American students majored in engineering--about twice as likely as white students and three times more likely than black and Hispanic students (table 3). This high concentration in the field of engineering was particularly true for male students. About one out of every five male Asian American students studied engineering (20 percent). It is interesting to note that the percentage of female Asian Americans who majored in engineering (9 percent) was as high as male students of other racial/ethnic groups (not shown in table 3).

Other popular fields of study for Asian Americans were business management (20 percent), computer science (7 percent), and life science (8 percent). About 3 percent of Asian American students majored in education (2 percent for males and 5 percent

for females).

## Financing Postsecondary Education

Financial resources for supporting postsecondary education are no better for Asian American students than for other students. The majority of Asian American students (50 percent) used their earnings and/or savings for college cost, as compared with 45 percent of Hispanics, 41 percent of blacks, and 58 percent of whites who did so.

Many Asian American students were from middle or low income families, and could be qualified for some kinds of grants. Data showed, however, Asian American students were less likely than other students to receive any types of grants: 39 percent as compared with 42 percent of Hispanics, 55 percent of blacks, and 41 percent of whites. About 24 percent of Asian American students received Pell grants (table 4).

About 7 percent of Asian American students received National Direct Student Loan, and 12 percent received guranteed student loans. Combining with all other kinds of loans, the percentage of Asian American students receiving any type of loans was lower than that for Hispanic, black, and white students (table 5).

## Conclusion and Discussion

In summary, Asian Americans had a higher entry rate to postsecondary education, and a higher persistence rate in college than other students. This finding reflects well on the traditonal

high value of education perceived by Asian Americans.

However, because of the diverse backgrounds of Asian Americans, it is possible that college entry rates may vary greatly among subgroups of them. A data base that allows examinations of the enrollment patterns by various subgroups of Asian Americans would be of great value.

A greater enrollment in the fields of science and engineering than other fields among Asian Americans has been a consistent trend over the past years. A number of possible reasons have been postulated by Tsang and Wing (1985), ranging from labor market condition to job discrimination. This enrollment pattern also is consistent with the greater emphasis on science and mathematics courses in high school: Asian American students may have been aspired to enter science and engineering fields at an early age and have begun necessary coursework when they were in high school.

The question of how students finance their education is always of a great interest to education policymakers. Overall the financial condition of Asian Americans is not better than that of other students. How to assist those students from low income families, or whether or not those students received adequate assistance, should be further examined.

Footnotes

1. Special thanks are due to Jeffrey Owings for his assistance in developing statistical table of college majors by the racial/ethnic group.
2. Asian Americans in this paper include Pacific Islanders.
3. All estimated differences cited in this paper differ from 0 by at least two standard errors (i.e., are significantly different from 0 at the .05 probability level, two-tailed test).

References

Bagasoa, P. Myths and realities. Paper presented at the Fifth East Coast Asian Education Conference, Washington, D.C., April, 1984.

Jones, C., et al., High School and Beyond: 1980 Senior and Sophomore Cohorts First Follow-Up Data Files. National Center for Education Statistics, 1984.

Peng, S., Fetters, W., & Owings, J. Achieving Excellence in Education: Experience of Asian American Students. Paper presented in annual meeting of American Educational Research Association, April 1984.

Tsang, S., & Wing, L. The educational achievement of Asian Americans. Paper presented in the annual meeting of American Educational Research Association, April 1985.

Table 1. Percentages of 1980 seniors who had entered post-secondary education, by race/ethnicity: February 1982

| Race/ethnicity | Total (1) | 4-year college | 2-year college | Voc/tech school |
|---|---|---|---|---|
| All students | 63 | 35 | 25 | 8 |
| Hispanic | 52 | 20 | 28 | 9 |
| Black | 60 | 33 | 20 | 11 |
| White | 64 | 37 | 25 | 7 |
| American Indian | 53 | 20 | 22 | 14 |
| Asian American | 86 | 51 | 37 | |

1. Sum of details can exceed totals because some respodents entered more than one type of institutions.

Source: Two Years After High School: A Capsule Description of 1980 Seniors. National Center for Education Statistics, U.S. Department of Education. NCES 84-209

Table 2. Percentages of 2- and 4-year college entrants who had persisted, transferred, completed short-term program or withdrew, by race/ethnicity: February 1982

| Race/ethnicity | 4-year college | | | 2-year college | | |
|---|---|---|---|---|---|---|
| | Persist | Transfer | Withdr* | Persist | Transfer | Withdr* |
| All students | 75 | 15 | 10 | 59 | 16 | 26 |
| Hispanic | 65 | 17 | 17 | 65 | 11 | 24 |
| Black | 71 | 14 | 15 | 61 | 15 | 24 |
| White | 75 | 15 | 9 | 57 | 16 | 27 |
| Asian American | 86 | 12 | 2 | 70 | 21 | 9 |
| American Indian | 81 | 11 | 9 | 61 | 21 | 18 |

Note: * includes students who had completed short-term programs (i.e., completers) and students who had left school without completing programs (i.e., withdrawals). These two types of students were not differentiated in this table because the information needed for doing so was not available.

Source: Two Years after High School: A Capsule Descriptions of 1980 seniors: NCES 84-209.

Table 3. Percentage of postsecondary students in specified fields of study about two years after high school graduation, by race/ethnicity: February

| Field of study | Hispanic | American Indian | Asian American | Black | White |
|---|---|---|---|---|---|
| All fields | 100 | 100 | 100 | 100 | 100 |
| Business & management | 13.6 | 9.1 | 20.1 | 17.3 | 18.6 |
| Business & office | 9.1 | 7.3 | 2.4 | 12.9 | 6.0 |
| Marketing & distr. | 1.2 | 1.0 | 1.1 | 1.9 | 2.0 |
| Communications | 3.0 | 4.9 | 1.7 | 3.1 | 3.1 |
| Computer science | 11.5 | 4.3 | 7.1 | 10.9 | 6.7 |
| Consumer service | 3.0 | 2.6 | .7 | 2.5 | 2.9 |
| Education | 5.6 | 10.8 | 3.4 | 3.8 | 7.7 |
| Engineering | 5.1 | 2.6 | 14.6 | 4.1 | 6.0 |
| Engineering tech. | 4.0 | 2.3 | 2.4 | 3.0 | 2.8 |
| Allied health | 3.6 | 3.3 | 3.0 | 5.4 | 3.7 |
| Health science | 7.0 | 7.2 | 5.6 | 9.0 | 5.8 |
| English | 1.1 | .2 | 2.0 | .8 | 1.6 |
| Liberal studies | 3.1 | 4.5 | 4.1 | [illegible] | 4.0 |
| Life science | 1.3 | 1.1 | 8.1 | 2.2 | 2.1 |
| Physical science | .4 | .9 | 4.5 | 1.1 | 1.8 |
| Psychology | 2.3 | 2.6 | 1.9 | 1.5 | 2.3 |
| Protective service | 2.1 | 2.1 | 1.0 | 1.2 | 1.4 |
| Social science | 2.7 | .2 | 4.2 | 2.5 | 4.5 |
| Mechanics | 1.4 | 12.4 | .8 | .8 | 2.2 |
| Precision prod. | 2.0 | 6.4 | 1.1 | 1.5 | 1.7 |
| Visual & perf. | 2.2 | 1.2 | 3.1 | 2.3 | 3.5 |
| Agriculture related | .8 | .0 | .5 | .3 | 1.7 |
| Other academic | 5.4 | 3.5 | 4.6 | 4.4 | 4.3 |
| Home economic | 2.2 | 1.2 | .6 | 1.2 | 1.5 |
| Other vocational | 3.0 | 1.6 | .7 | 1.5 | 1.4 |
| All other fields | 3.4 | 6.7 | .7 | .9 | .8 |

Table 4. Percentage of 1980 high school seniors attending post-secondary education who received grants, by race/ethnicity

| Race/ethnicity | Pell grant | SEOG grant | All types |
|---|---|---|---|
| All students | 24.5 | 6.2 | 42.6 |
| Hispanic | 29.5 | 6.8 | 42.3 |
| American Indian | 24.4 | 4.9 | 50.6 |
| Asian American | 23.9 | 8.5 | 38.7 |
| Black | 41.5 | 10.1 | 54.8 |
| White | 22.0 | 5.6 | 41.2 |

Source: C. Dennis Carroll, High School and Beyond Tabulation: Postsecondary Student Financial Aid Indices for the High School Class of 1980. The National Center for Education Statistics, December 1983.

Table 5. Percentage of 1980 high school seniors attending post-secondary education who received loans, by race/ethnicity

| Race/ethnicity | Guaranteed student loan | National Direct Student Loan | All types |
|---|---|---|---|
| All students | 12.4 | 9.9 | 29.7 |
| Hispanic | 10.8 | 8.0 | 27.1 |
| American Indian | 6.0 | 7.1 | 22.8 |
| Asian American | 11.8 | 6.8 | 25.2 |
| Black | 9.8 | 11.6 | 28.7 |
| White | 13.0 | 10.0 | 30.2 |

Source: C. Dennis Carroll, High School and Beyond Tabulation: Postsecondary Student Financial Aid Indices for the High School Class of 1980. The National Center for Education Statistics, December 1983.